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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,888

Applicant(s)

SIM ET AL.

Examiner

Andrew Y Koenig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5.6</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Nomenclature for denoting multiple dependent claims

1. Multiple dependent claims will be written in the form of the **claim number/claim dependency**. For example: claim 5/4 is a short hand notation for claim 5 depending from claim 4.

Claim Objections

2. Claim 6 is objected to because of the following informalities:

Claim 6 recites the limitation "said content" in line 5. There is insufficient antecedent basis for this limitation in the claim. The claim recites, "characteristics of said content being represented by said content description data." For the rest of the Office Action, "characteristics of said content being represented by said content description data" will be treated as, "characteristics of said content description data being represented by said content description data."

3. Claims 5/4, 18/4, 18/5, and 18/13 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5/4, 18/4, 18/5, and 18/13 have not been further treated on the merits.

Since claims 6-17 depend from the objected to claims, they are objected to due to their dependency.

For the purposes of examination, claim 5 will be treated as being dependent from claim 3, and claim 18 will depend from claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3 and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 5,677,905 to Bigham et al. (hereinafter Bigham).

Regarding claim 1, Bigham teaches a level-1 gateway (19), as shown in figure 1, which equates to the claimed distribution switch. Bigham teaches the HDT (1180), as shown in figure 3, for switching video channel in response to subscriber requests (col. 20, ll. 6-11). Bigham teaches the HDT, which reads on a control unit, for switching the channels (col. 20, ll. 35-54). Bigham teaches controlling access based on the user data stored in the level-1 gateway (col. 11, ll. 11-25, col. 12, ll. 35-44).

Regarding claim 2, Bigham teaches receiving requests from the subscriber (col. 20, ll. 6-10) and clearly forwards the data within itself to requesting access via the HDT, which is for pay-per-view events, etc. (col. 22, ll. 36-51), wherein the message is forwarded in order to verify the user, which reads on "in accordance with the conditional access data."

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Regarding claim 3, Bigham teaches that the video signals are received from the video information providers (fig. 1, 3A), and receiving conditional access data from the remote subnetwork controller (fig. 3A, label 1231, col. 22, ll. 36-51).

Regarding claim 19, Bigham teaches MPEG video from Video information providers (VIPs). Bigham teaches receiving digital video signals from sources by using an internetworking unit as an interface (col. 19, ll. 5-17, col. 19, ll. 45-59, fig. 3A, label 1130), which reads on a DVB interface unit having means for receiving DVB signals and channel interface unit for extracting the video signals (col. 20, ll. 6-10). Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48). Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48).

Regarding claim 20, Bigham teaches MPEG video (col. 17, ll. 26-36; col. 20, ll. 35-54).

Regarding claim 21, Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48).

Regarding claim 22, Regarding claim 20, Bigham teaches ATM cells (col. 17, ll. 26-36; col. 20, ll. 35-54).

Regarding claim 23, Bigham teaches an HDT for identifying the selected channel (for extraction)(col. 20, ll. 6-21), and multiplexing the signal (col. 20, ll. 35-54).

Regarding claim 24, Bigham teaches the HDT, as shown in figure 3, for switching video channel in response to subscriber requests (col. 20, ll. 6-11). Bigham teaches the HDT, which reads on a control unit, for switching the channels (col. 20, ll. 35-54).

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Bigham teaches controlling access based on the user data stored in the level-1 gateway (col. 11, ll. 11-25, col. 12, ll. 35-44).

Regarding claim 25, Bigham teaches removing jitter from the packets (col. 17, ll. 40-42).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-11, 13-18, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,677,905 to Bigham et al. (hereinafter Bigham) in view of U.S. Patent 5,812,928 to Watson, Jr. et al. (hereinafter Watson).

Regarding claim 4, Bigham teaches receiving video signals for video channels (col. 20, ll. 18-21) and teaches conditional access, but is silent on extracting the conditional access data from the video signal for input to the control unit. Watson teaches placing the rating (claimed conditional access) information in the video channel (col. 25, ll. 41-42), which is clearly extracted in order to compare to the user's ratings to that of the received video (col. 25, ll. 41-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by placing and extracting the conditional access information of the video signal as taught by Watson in order to efficiently communicate the information to the device.

Regarding claim 5/3, Bigham teaches authorization (col. 12, ll. 35-44), which reads on entitlement data and consequently equates to the conditional access data in that access to the data is conditional upon authorization. Further, Bigham teaches parental control functionality (col. 69-70, ll. 61-3), but is silent on content description data. Watson teaches using rating information (col. 25, ll. 41-42), which reads on a content description data, in that the rating is formed from the content of the programming (Watson: col. 25, ll. 26-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using content description data as taught by Watson in order to implement the rules of controls of a parental control system thereby ensuring that viewed content is appropriate for the selected audience.

Regarding claim 6, Bigham teaches permitting transmission of the video channel when the user has access to programming (col. 22, ll. 36-51) and Bigham teaches implementing parental control (col. 69-70, ll. 61-3), but is silent on comparing the content description and entitlement data. Watson teaches comparing ratings (content description) and user information (claimed entitlement data) (col. 25, ll. 40-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by comparing content description and entitlement data as taught by Watson in order to effectively block and permit programming to be sent to the user.

Regarding claim 7, Bigham teaches authorization (col. 12, ll. 35-44), which reads on entitlement data, but is silent on the characteristics including a program tier level,

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wherein the entitlement data include tier level data. Bigham teaches parent control (col. 69-80, ll. 63-3) as does Watson (col. 25, ll. 18-52), but Bigham and Watson are silent on tiers. Official Notice is taken that the use of tiers (such as ratings of R, PG-13, PG, G) is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham and Watson by using tiers in order to block programming of certain ratings of R, PG-13, etc.

Regarding claim 8, Bigham and Watson are silent on characteristics and entitlement data including geographic information. Official Notice is taken that geographic information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham and Watson by using geographic information in order to target programming/commercials to targeted audiences thereby increasing the effectiveness of the video.

Regarding claim 9, Bigham and Watson are silent on entitlement data including expiry data. Official Notice is taken that using expiration data is well known (such as a time windows for VOD/pay-per view programming). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using expiration information in order to enable programming to be viewed within a window of time thereby permitting the user flexibility in accessing the programming.

Regarding claim 10, Bigham teaches parental control, but is silent on characteristics including classification data. Watson teaches rating information (col. 25,

ll. 41-42), which equates to classification data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using classification data as taught by Watson in order to implement the rules of controls of a parental control system thereby ensuring that viewed content is appropriate for the selected audience.

Regarding claim 11, the combination of Bigham and Watson teaches the use of classification data. By passing the signal along wherein the classification data is provided along with the video signal (see Watson col. 25, ll. 41-52), the signal still includes the classification data.

Regarding claim 12, Bigham teaches a two way connection between the level-1 gateway and the user (VIU and DET) for providing additional functions (col. 69, ll. 44-67), which reads on the claimed switch communicating with subscriber equipment at the premises of the subscriber. Further, Bigham teaches interactive session between the level-1 gateway and the user (which uses the DET for communication), therefore the subscriber equipment (DET) uses sends information to the level-1 gateway for controlling parental control (col. 69, ll. 44-67), wherein the discussion of program classification has been addressed above.

Regarding claim 13, Bigham teaches parental control, but is silent on classification data as parental level. Watson teaches the use of ratings (claimed classification data) for parental control (col. 25, ll. 26-30, col. 25, ll. 41-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using classification data as taught by Watson in order to

implement the rules of controls of a parental control system thereby ensuring that viewed content is appropriate for the selected audience.

Regarding claim 14, Bigham is silent on accessing when the program tier corresponds to the user, geographic data matches the user's region, and the program has not expired. Bigham teaches parent control (col. 69-80, ll. 63-3) as does Watson (col. 25, ll. 18-52), but both are silent on a tiers. Official Notice is taken that the use of tiers (such as ratings of R, PG-13, PG, G) is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham and Watson by using tiers in order to block programming of certain ratings of R, PG-13, etc. Bigham and Watson are silent on characteristics and entitlement data including geographic information. Official Notice is taken that geographic information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham and Watson by using geographic information in order to target programming/commercials to targeted audiences thereby increasing the effectiveness of the video. Bigham and Watson are silent on entitlement data including expiry data. Official Notice is taken that using expiration data is well known (such as a time windows for VOD/pay-per view programming). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using expiration information in order to enable programming to be viewed within a window of time thereby permitting the user flexibility in accessing the programming.

Regarding claim 15, Bigham teaches MPEG video from Video information providers (VIPs). Bigham teaches receiving digital video signals from sources by using an internetworking unit as an interface (col. 19, ll. 5-17, col. 19, ll. 45-59, fig. 3A, label 1130), which reads on a DVB interface unit having means for receiving DVB signals and channel interface unit for extracting the video signals (col. 20, ll. 6-10). Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48).

Regarding claim 16, Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48); wherein the channels are video and uses ATM cells (col. 20, ll. 35-54).

Regarding claim 17, Bigham teaches time division multiplexing the video onto the data path (col. 20, ll. 44-48), wherein the channels are MPEG video and uses ATM cells (col. 20, ll. 35-54).

Regarding claim 18/1, Bigham teaches the use of ADSL, which reads on DSL, and inherently uses transceivers for communicating with the users (col. 20, ll. 63-65).

Regarding claim 26, Bigham teaches receiving video signals for video channels (col. 20, ll. 18-21) and teaches conditional access, but is silent on extracting the conditional access data from the video signal for input to the control unit. Watson teaches placing the rating (claimed conditional access) information in the video channel (col. 25, ll. 41-42), which is clearly extracted in order to compare to the user's ratings to that of the received video (col. 25, ll. 41-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by

placing and extracting the conditional access information of the video signal as taught by Watson in order to efficiently communicate the information to the device.

Regarding claim 27, Bigham teaches authorization (col. 12, ll. 35-44), which reads on entitlement data and consequently equates to the conditional access data in that access to the data is conditional upon authorization. Further, Bigham teaches parental control functionality (col. 69-70, ll. 61-3), but is silent on content description data. Watson teaches using rating information (col. 25, ll. 41-42), which reads on a content description data, in that the rating is formed from the content of the programming (Watson: col. 25, ll. 26-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bigham by using content description data as taught by Watson in order to implement the rules of controls of a parental control system thereby ensuring that viewed content is appropriate for the selected audience.

Regarding claim 28, Bigham teaches the HDT for storing access information and switching in accordance with the information (col. 22, ll. 36-51).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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CHRIS GRANT
PRIMARY EXAMINER